

551, 229

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number  
**WO 2005/072990 A1**

(51) International Patent Classification<sup>7</sup>: **B60C 5/00**,  
C09K 5/00

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(21) International Application Number:  
**PCT/IT2004/000021**

(22) International Filing Date: 28 January 2004 (28.01.2004)

(25) Filing Language: Italian

(26) Publication Language: English

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): **SAPIO  
PRODUZIONE IDROGENO OSSIGENO SrL [IT/IT]**  
Galleria Passarella, 2, I-20122 Milano (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SEGHEZZI, Andrea**  
[IT/IT]; Via Cimabue, 34/c, I-20052 Monza (MI) (IT).

(74) Agent: **SANDRI, Sandro**; Europatent - Euromark Srl, Via  
Locatelli, 20, I-37122 Verona (IT).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

WO 2005/072990 A1

(54) Title: GAS MIXTURE, IN PARTICULAR FOR INFLATING THE TYRES OF VEHICLES

(57) Abstract: A gaseous composition particular suitable for inflating the tyres of vehicles presents a high heat transfer capacity. This composition is advantageously based on hydrofluorocarbons, able to effectively conduct the heat generated during the rotation of the tyre to the wheel rim and at a more or less constant pressure. The wheel rim acts as a radiator, exchanging the heat with the outside air, maintaining the tyre temperature low and preventing it from overheating. Tyres inflated with this mixture have a longer life and give better performance.